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YAMANOUCHI PHARM CO LTD

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New bi:cyclic fused imidazole derivs - used as aldosterone biosynthesis inhibitors, e.g. for treating chronic or congestive heart

C97-074386

Bicyclic fused imidazole derivs. of formula (I) and their salts are new.

$$\begin{array}{c|c}
 & R^1 \\
 & R^2 \\
 & R^2
\end{array}$$

A = 5-6 membered unsatd. heterocyclic ring contg. 1-4 N or S; B = a bond or opt. OH-substd. alkylene;

R¹, R² = H, halogen, lower alkyl, lower alkoxy, NR³R⁴, S(O)_mNR⁵R⁶

B(6-D7, 14-D2A1, 14-D3, 14-E10, 14-F1B, 14-L6, 14-N10, 14-N17) .6

or morpholinyl;

 $R^3-R^5 = H$ or lower alkyl;

m = 1 or 2.

<u>USE</u>

(I) are aldosterone biosynthesis inhibitors (claimed) used for treatment of chronic heart failure, myocardial fibrosis, hyperaldosteronism, hypokalaemia, alkalosis, polyuria, renal or intrinsic hypertension, congestive heart failure, left ventricular failure, oedema, cirrhosis, cardiac hypertrophy or disorders of the skin and digestive organs.

Dosage is 0.1-100 (pref 0.1-10) mg/day in one or divided oral

doses, or 0.1-100 mg/day by parenteral administration.

(I) specifically inhibit the cytochrome P450 C18 enzyme. They show in vivo inhibitory activity to aldosterone produ at a dose of 10 mg/kg or lower.

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PREPARATION

(1) are prepd. e.g. as follows:

$$\mathbb{R}^{1}$$
 \mathbb{R}^{2}
 \mathbb{R}^{2}
 \mathbb{R}^{2}

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V = H, trityl, acetyl, $CON(Me)_2$ or $SO_2N(Me)_2$; W = Cl, Br, mesyloxy or tosyloxy. (RMH) (21pp079DwgNo.0/0)

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